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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,296	01/10/2002	Chris D. Constantinides	56783	6836

21874 7590 02/23/2006

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EXAMINER

SULLIVAN, JULIANNE M

ART UNIT	PAPER NUMBER
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3737

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/044,296	CONSTANTINIDES, CHRIS D.	
	Examiner	Art Unit	
	Julianne M. Sullivan	3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to Claims 1-5, 16-19 and 28-35 have been considered but are moot in view of the new ground(s) of rejection.

With respect to Applicant's arguments regarding the Hogenkamp (U.S. Patent Application Publication No. 2002/0049155) reference, the Examiner agrees that the teaching of iron dextran as a therapeutic agent does not teach the use of an iron oxide contrast agent. However, the Examiner notes that if the reference had taught the relevant feature, the mere placement of that teaching in the Background section of the reference would not preclude its use in a rejection. Similarly, the lack of any specifically reported experimentation results in a reference would not disqualify it as prior art. See MPEP § 2123.

Specification

2. The following typographical error(s) was noted in the Claims: "infracted" in Claim 6, line 2. Appropriate correction is suggested.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Judd et al. (U.S. Patent No. 5,910,112) in view of Weissleder (U.S. Patent No. 5,492,814).

Judd et al. teaches a method of evaluating biological tissue by imaging it with ^{23}Na or ^{39}K magnetic resonance and a magnetic resonance system for ^{23}Na or ^{39}K MRI, where the tissue is cardiac tissue, where a study is made of the subject's heart and the cardiac tissue is identified as normal, injured or infarcted and where the subject has or had a cardiac or cardiovascular disorder (col. 1, lines 15-18, col. 3, lines 32-37 and 46-53, col. 4, lines 12-30, col. 22, lines 43-67 and col. 23, lines 1-23). Judd et al. does not expressly teach the use of an iron oxide contrast agent. In the same field of endeavor, Weissleder teaches an iron oxide contrast agent for use in MRI, where the tissue imaged may be damaged heart tissue, such as infarcted myocardium, where the contrast agent has one or more iron atoms coordinated with a polymer having oxygen substitution, with a polysaccharide and with a dextran and where the contrast agent is in a pharmaceutically acceptable form (col. 1, lines 16-24 and 41-55, col. 3, lines 1-11 and 28-36, col. 5, lines 7-16 and 50-63, col. 16, lines 61-67 and col. 17, lines 1-12). It would have been obvious to one of ordinary skill in the art at the time of the invention to have used the iron oxide contrast agent from Weissleder to enhance the visualization in the images of Judd et al. because the use of contrast agents in MRI to improve quality is well known in the art (for motivation, *see e.g.*, Ranney (U.S. Patent No. 5,336,762) at col. 7, lines 48-61). Although neither Judd et al. nor Weissleder specifically teaches the use of MION-46, Weissleder does teach the use of a variety of MION formulas that include dextran, of which MION-46 would have been an obvious choice to one of ordinary skill in the art.

Conclusion

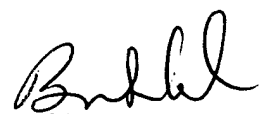
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julianne M. Sullivan whose telephone number is 571-272-6084. The examiner can normally be reached on Monday through Friday 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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